The specimen is a hindwing of a *Progonophlebia*, larger than the species described by Tillyard in 1925.

Progonophlebia cromptoni sp. nov.

Plate 72, fig. 4

Diagnosis. A *Progonophlebia* with wings approximately 43 mm. long.

Distribution. Lower Lias, Cheltenham, Gloucestershire.

Holotype. British Museum (Natural History), In. 49297, G. E. Gavey Collection, presented by Rev. J. Crompton, May 1956.

Parts known. Hindwing.

Description. To facilitate comparison, I am following Tillyard's wording and terminology closely (Tillyard 1925), although I do not agree with his interpretation of the venation.

Costal space crossed by two strongly formed antenodals, one on either side of the arculus. Nodus placed about half-way along the costal margin, and formed by the subcosta running into the costal margin with a slight bend upwards, and supported below, just before the actual apex of Sc, by a cross-vein, at the lower end of which R bends obliquely downwards for a very short distance, and then turns to run straight below C, giving off a very strong cross-vein placed slightly obliquely, which is the subnodus. Postnodals few in number. Pterostigma of moderate length, enclosed by oblique cross-veins, which are more distal on the Sc than on the R and curved, with their concavity towards the base of the wing. M_1 slightly converging with R towards the pterostigma. M_{1A} rootless and converging with M_1 in the apex. M_2 arising distad of the subnodus, being separated from it by almost two complete inter-cross-vein spaces. This is characteristic of *Progonophlebia*. M_S arising from a cross-vein placed in the angle between M_{1+2} and M_3, and separated from both by only one row of cells. M_2, M_S, and M_3 terminate close together far distad along the wing in the apex. M_4 slightly zigzagged in the middle of its course, though less so than in *P. woodwardi* Till. It continues to do so toward its end, where it converges with Cu_1. Cu_1 well developed, but not stronger than the other longitudinal veins. Cu_2 weak, disappearing in the network of cells. Discoidal cell undivided, longer than wide (shorter in *P. woodwardi*). Anal portion of wing missing. Length 43·5 mm. (apex damaged); maximum width 11·2 mm.

Remarks. The agreement with *Progonophlebia woodwardi* Till. is so close that there can be no doubt about the generic identity. Several details are included in the description which are not available in Tillyard's species. The chief difference between *P. woodwardi* and *P. cromptoni* is that the latter is much longer, the total length being 43·5 instead of only 35 mm. The other specific differences are in the shape of M_4 and the discoidal cell, and in slight deviations of the courses of the veins from the picture presented by Tillyard (1925, fig. 1). These are characteristically differences on the species level. Two species of *Progonophlebia*, therefore, visited the coastal regions of the British Lias, just as there are several species of *Libellula* to be observed on ponds at the present day.

REFERENCE

TILLYARD, R. J. 1925. *The British Liassic Dragonflies.* London, Brit. Mus. (Nat. Hist.).

JURASSIC BEETLES FROM GRAHAMLAND, ANTARCTICA

by F. E. ZEUNER

THE Falkland Islands Dependencies Geological Survey has produced a few remains of fossil insects from Mount Flora, Hope Bay, Grahamland, Antarctica. In view of the locality alone these specimens are of considerable interest, though from the point of view of classification

they will remain somewhat obscure until more material has been assembled. They were collected by the late Mr. W. N. Croft of the British Museum (Natural History) in 1946.

Four beetle elytra belonging to at least two different species are preserved in a piece of black shale (with counterpart). They are associated with numerous unidentifiable fragments of plants. One of the elytra shows evidence of prolonged soaking in water, the others look fresh and appear to have been thicker. One is fragmented (In. 51767), and there are some unidentifiable traces of insect legs. The concentration of the specimens in one layer and on a small piece of shale measuring 4×4 in. suggests that this is a potentially prolific locality for fossil insects. On the other hand, the insect remains appear to have drifted about in water, so that mainly detached wings and legs are likely to be found if further collecting is undertaken. In any case, they are not abundant in all horizons, for Dr. Mary Calder has not found other insect remains among the plant specimens she is studying from the same locality. The late Mr. W. N. Edwards inclined to the view that the plant remains on the slab under discussion may be rootlets.

Locality: Mount Flora, Grahamland, 25 feet below top of plant horizon, 25 yards west of the Arête, altitude *c.* 1175 feet, No. D. 37. 15. *Types*. British Museum (Natural History), nos. given below.

Grahamelytron crofti gen. et sp. nov.

Plate 72, figs. 1, 2

Holotype. In. 51764, Pl. 72, fig. 1, with counterpart. *Paratype*. In. 51765, Pl. 72, fig. 2, with counterpart. *Size*. Elytron (holotype): length 11·5 mm., width 4·8 mm.

Description. The external margin forms a narrow, slightly upturned flange. There are fifteen longitudinal grooves separating slight 'ridges'. Of the latter every second bears small tubercles, which are especially pronounced in the distal portion. These may be due to the internal structure of the elytron and they need not have been apparent in life. In this case, the elytron would have offered a smooth external appearance with fifteen fine grooves. The alternative of external tubercles cannot however be ruled out. In any case the tuberculate ridges are wider than the intermediate ones. The fusion of the grooves and ridges at the apex of the elytron is obscured in the holotype by folds due to softening in water.

The holotype is a left elytron, and the paratype is a right one. Its basal portion is missing, 7 mm. being preserved. Its measurable width, 4·6 mm., agrees closely with that of the holotype, and it lies in close proximity to it. The two therefore are likely to have formed a pair, coming from the same individual. The number of grooves is the same, and the tubercles are well preserved (fig. 2). Again, the tuberculate ridges are wider than the smooth ones.

Interpretation. The structure of the elytron of this species, which is being dedicated to the memory of the late W. N. Croft of the British Museum (Natural History), is not inconsistent with that of certain Carabidae, for instance *Calosoma*, in which genus a similarly large number of grooves is present. Most other genera have fewer. A fossil genus that has a similar number of rows of tubercles is *Mesosagrites* Martynov (1935) from the Mesozoic of Cheliabinsk. Moreover, it resembles the Antarctic fossil in shape. *Mesosagrites multipunctatus* Martynov, which

EXPLANATION OF PLATE 72

Figs. 1, 2. *Grahamelytron crofti* gen. et sp. nov., Mount Flora, Grahamland, Antarctica. 1*a*, *b*, Holotype and counterpart, In. 51764, ×5·5. 2*a*, *b*, Paratype and counterpart, In. 51765, ×7.

Fig. 3. *Ademosynoides antarctica* sp. nov., Mount Flora, Grahamland, Antarctica. Holotype, In. 51766, ×8.

Fig. 4. *Progonophlebia cromptoni* sp. nov., Lias, Cheltenham, Gloucestershire. Holotype, In. 49297, ×1·9.

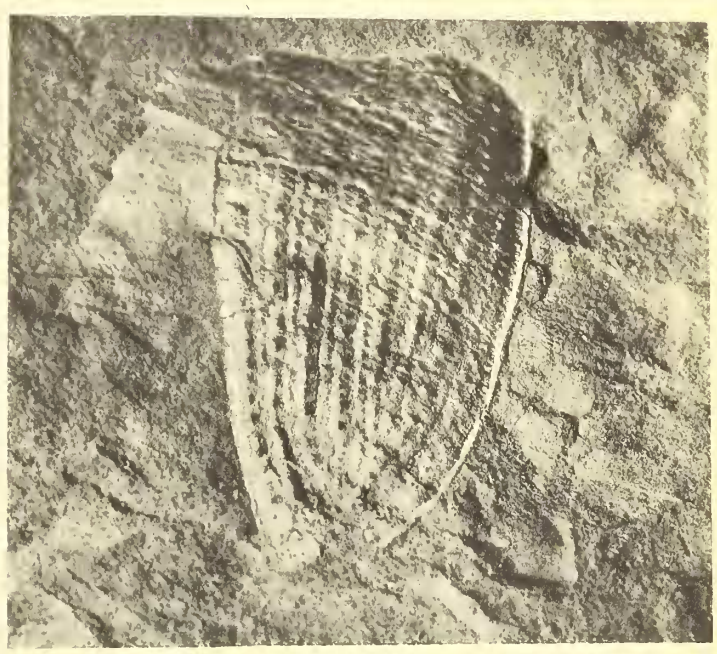
The specimens are in the British Museum (Natural History).

1a × 5.5

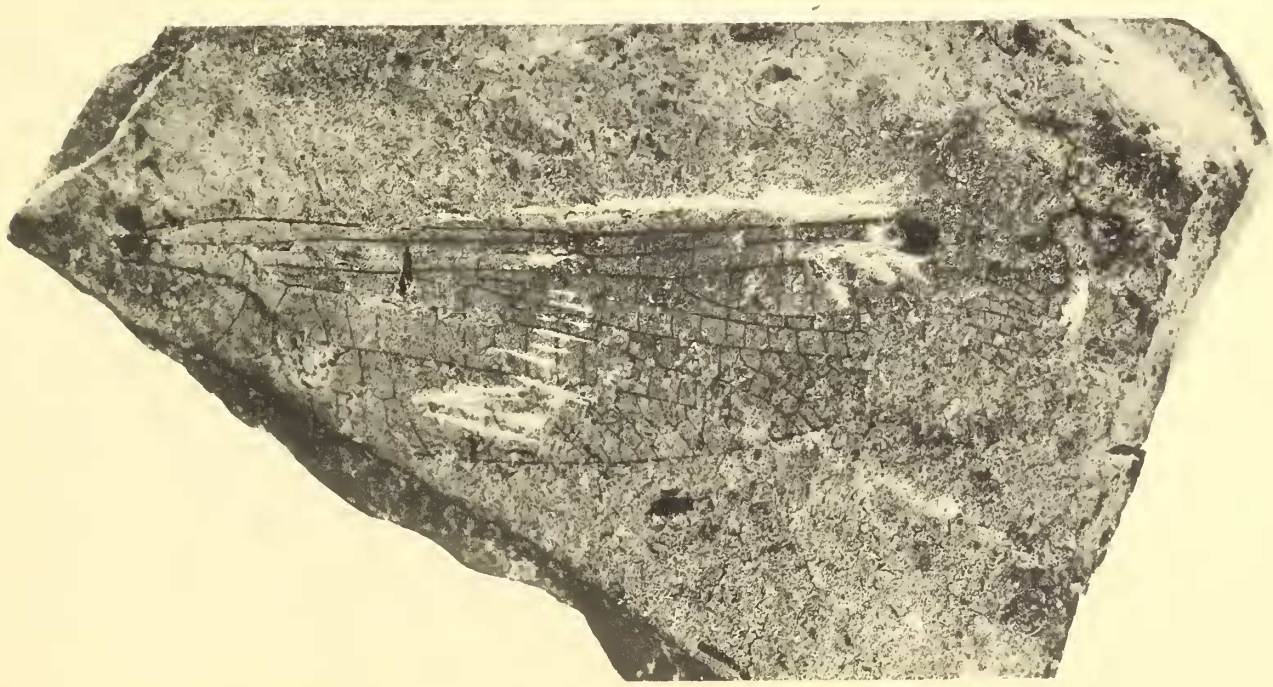
3 × 8

1b × 5.5

2a × 7



2b × 7



4 × 1.9

ZEUNER, Jurassic insects